

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

BUER, *et al*

Appl. No.: 10/728,192

Filed: December 4, 2003

For: **Tagging Mechanism for Data Path
Security Processing**

Confirmation No.: 7312

Art Unit: 2437

Examiner: Williams, Jeffrey L.

Atty. Docket: 2875.0170001

Reply Brief Under 37 C.F.R. § 41.41

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Sir:

Appellants filed a Brief on Appeal to the Board of Patent Appeals and Interferences for the above-captioned application on September 20, 2010, appealing the decision of the Examiner in the Final Office Action mailed October 14, 2009. The Examiner's Answer was mailed on January 10, 2011. In reply to the Examiner's Answer, Appellants submit this Reply Brief Under 37 C.F.R. § 41.41.

It is not believed that extensions of time are required beyond those that may otherwise be provided for in documents accompanying this paper. However, if additional extensions of time are necessary to prevent abandonment of this application, then such extensions of time are hereby petitioned under 37 C.F.R. § 1.136(a), and any fees required therefor (including fees for net addition of claims) are hereby authorized to be charged to our Deposit Account No. 19-0036.

I. Argument

A. Objections to the Specification

USER-SPECIFIC TYPE FIELDS

Appellants maintain their position that the specification provides proper antecedent basis for the recitations “a user-specific type field”, “a user-specific Ethernet type” and “a user-specified Ethernet type.” In the Examiner’s answer, the Examiner acknowledged that Appellant’s disclosure provides ample support for the term “Ethernet type field.” (Examiner’s Answer, p. 6.) The Examiner further acknowledged that the Ethernet type field is (1) registered by a protocol designer with the IEEE and (2) used by Ethernet systems for determining the specific protocol necessary for processing received Ethernet packets:

As, there can be a large number of possible processing protocols, the IEEE organization acts as the authority to manage and assign a unique two byte hexadecimal number for representing each possible protocol. Thus, protocol designers, such as standards organizations or equipment manufacturers can design processing protocols and register the protocol with the IEEE. Thereafter, the registered protocol will be assigned a unique Ethernet type value, which can be used by Ethernet systems for determining the specific protocol necessary for processing any received Ethernet packet comprising the Ethernet type field.

(Examiner’s Answer, pp. 5-6)(emphasis added).

The entire basis for the Examiner’s objection is the Examiner’s view that the term “user” is limited to “a person who uses the services of or interacts with a product or system.” (Examiner’s Answer, p. 7.)(emphasis added). Appellants respectfully disagree with this restrictive view of the term “user.”

The broadest reasonable interpretation of the term “user” is a person or thing that uses. The term “user” is therefore not limited to a person. A company, a system, a device could be a “user.” This interpretation of the term user is supported by the Examiner. In the Examiner’s

Answer, the Examiner states that the unique Ethernet type value, “can be used by Ethernet systems.” Thus, according to the Examiner, Ethernet systems are “users” of the Ethernet type value. This interpretation of the term “user” is further supported by Appellants’ specification which explains:

When the security processor receives a packet 60 with the security processor’s address in the DA field of the outer header 66, the security processor may check the Ethernet type field 62 to determine how to process the packet header. A company such as Broadcom Corporation may have a unique registered Ethernet type 62 that is used to define in-band packet communication.

(Appellants’ Published Specification, ¶ [0060]). Thus, the specification describes that a company such as Broadcom uses the Ethernet type field to identify the protocol used by its systems to communicate. Broadcom is unquestionably a user of the Ethernet Type field. The Ethernet type field registered to Broadcom is therefore a user-specific [Ethernet] type.

Furthermore, an applicant is not required to use the identical language in the claim as in the specification. As discussed in MPEP 2173.05(e), “[t]he mere fact that a term or phrase used in the claim has no antecedent basis in the specification disclosure does not mean, necessarily that the term or phrase is indefinite. There is no requirement that the words in the claim must match those used in the specification. Applicants are given a great deal of latitude in how they choose to define their invention so long as the terms and phrases used define the invention with a reasonable degree of clarity and precision.”

As discussed above, the recitations “user-specific type,” “user-specific Ethernet type” and “user-specified Ethernet type” are defined with reasonable clarity and precision in Appellants’ specification. Appellants therefore respectfully request that the objection to the specification as failing to provide proper antecedent basis for the recitations of “a user-specific type”, “a user-specific Ethernet type” and “a user-specified Ethernet type” be reversed.

PRE-POPULATION RECITATIONS

Appellants maintain their position that the specification provides proper antecedent basis for the recitations "pre-populated with an address ..." and "the pre-populated header" as found recited within claim 17. Appellants note that the Examiner failed to specifically address this objection in the Examiner's Answer. (*See Examiner's Answer*, pp. 5-7). Appellants further note that the Examiner withdrew the corresponding § 112 rejections that were based on these terms. (*See Examiner's Answer*, p. 3.) Therefore, it appears that the Examiner may have intended to withdraw this objection to the specification.

B. Rejections Under 35 U.S.C. § 112, First and Second Paragraphs

Appellants maintain their position that claims 5-7, 9, 18, and 30 comply with the written description requirement and that claims 5-7, 9, 18, and 30 are not indefinite. The Examiner's Rejections Under 35 U.S.C. § 112 first and second paragraphs of these claims derive from the same perceived issues as the Examiner's objection to the specification relative to the terms "user-specific type," "user-specific Ethernet type" and "user-specified Ethernet type."

REJECTION UNDER 35 U.S.C. § 112, FIRST PARAGRAPH

The fundamental factual inquiry for determining compliance with the written description requirement is "whether the specification conveys with reasonable clarity to those skilled in the art that, as of the filing date sought, applicant was in possession of the invention as now claimed." M.P.E.P. § 2163.02, *citing Vas-Cath, Inc. v. Mahurkar*, 19 U.S.P.Q.2d 1111, 1117 (Fed. Cir. 1991). Possession may be shown by showing that the invention was "ready for patenting," for example, by describing distinguishing identifying characteristics sufficient to

show that the applicant was in possession of the claimed invention. M.P.E.P. § 2163.02, *citing Pfaff v. Wells Elecs., Inc.*, 525 U.S. 55, 68 (1998).

The above citation from the specification, among others, demonstrate that the specification describes the claimed invention, specifically the terms “user-specific type,” “a user-specific Ethernet type”, and “a user –specified Ethernet type,” in sufficient detail that one skilled in the art can reasonably conclude that the inventor had possession of the claimed invention. Accordingly, the Examiner’s rejection under 35 U.S.C. § 112, first paragraph should be reversed.

REJECTION UNDER 35 U.S.C. § 112, SECOND PARAGRAPH

The second requirement of 35 U.S.C. §112, second paragraph, that "the claims must particularly point out and distinctly define the metes and bounds of the subject matter that will be protected by the patent grant" is "an objective one because it is not dependent on the views of [the] applicant or any particular individual, but is evaluated in the context of whether the claim is definite - i.e., whether the claim is clear to a hypothetical person possessing the ordinary level of skill in the pertinent art."

As discussed above, in view of the specification, the recitations of the terms “user-specific type,” “user-specific Ethernet type” and “user-specified Ethernet type” as used in claims 5-7, 9, 18 and 30 would be clear to a hypothetical person possessing the ordinary level of skill in the pertinent art. Therefore, the Examiner's rejection under 35 U.S.C. § 112, second paragraph should be reversed.

C. *Claims 1-4, And 16 Are Unpatentable Under 35 U.S.C. § 103(a) Over Bryers In View Of Hadzic And Mercer.*

Appellants maintain their position that claims 1-4 and 16 are patentable over the combination of Bryers, *et al*, U.S. Patent Publication 2003/0126233 (“Bryers”) in view Hadzic,

U.S. Patent No. 7,130,303 ("Hadzic") and Mercer, U.S. Patent Publication No. 2003/0018908 ("Mercer"). Appellants note that the Examiner did not present any rejections of claims 17, 22-29, 31, and 35-40 under 35 U.S.C. §§ 102 or 103 in the final rejection or the Examiner's Answer. Appellants therefore presume that the Examiner has found claims 17, 22-29, 31 and 35-40 patentable under 35 U.S.C. § 102 and/or § 103.

Independent claim 1 recites, in part:

1. A method of generating encrypted packets comprising the steps of:

receiving, in a security processor, a first Ethernet packet from an originating device, the first Ethernet packet comprising a second Ethernet packet and a memory address with a security association, wherein a destination address of the second Ethernet packet is an address of the originating device

FIG. 3 of Appellants' specification (reproduced below) depicts embodiments of the recited invention of claim 1.

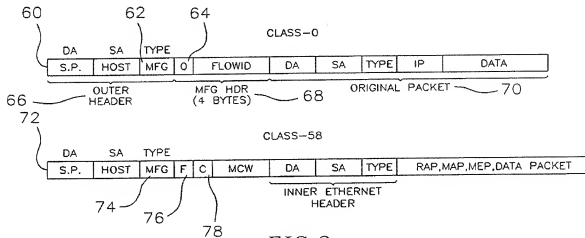


FIG. 3

As depicted in FIG. 3, the original packet (second Ethernet packet) is encapsulated in an outer Ethernet packet (first Ethernet packet). The inner original packet has source address (SA) and destination address (DA) fields. The header of the outer Ethernet packet (first Ethernet packet) also has source address and destination address fields. In the embodiments depicted in

FIG. 3, the destination address of the outer Ethernet packet (first Ethernet packet) is set to the address of the security processor, "S.P.", and the source address is set to the address of the "HOST." As recited in claim 1, the destination address field of the inner Ethernet packet (second Ethernet packet) (e.g., the original packet of FIG. 3) is pre-populated with the address of the originating device. In accordance with the language of claim 1, in the CLASS-0 packet embodiment of FIG. 3, the destination address of the original inner Ethernet packet would be pre-populated with the address of the "HOST" (i.e., the address of the originating device).

In support of the rejection of independent claim 1, the Examiner ignores the language of claim 1 and impermissibly imports alleged disclosures from Appellants' specification into the claim. Specifically, in the Examiner's Answer, the Examiner states:

Essentially, appellant argues that the examiner's application of appellant's own teachings is irrelevant to the claimed invention. Specifically, the appellant teaches that a receiving device will identify an address of an originating device using the inner Ethernet header of a received packet, the inner Ethernet header comprising a source address of the sending device (SA) and a destination address (DA). The receiving device will then use the identified address of the originating device (i.e., SA) as a destination address for sending data back to the originating device. Thus, according to the point of view of the receiving device, the source address of the originating device (SA), is a destination address (DA) for which to send a response, just as the applicant has claimed, wherein "a destination address of the second Ethernet packet is an address of the originating device."

(Examiner's Answer, p. 21)(emphasis in original).

The point of view of the receiving device and the actions that may be taken by the receiving device to respond to a received packet are not relevant to interpretation of the first element of claim 1. This element of claim 1 requires that the destination address of the embedded second Ethernet packet received by a security processor be pre-populated with the address of the originating device ("*wherein a destination address of the second Ethernet packet is an address of the originating device*"). The Examiner acknowledges that the destination field

of Hadzic is not populated with the address of the originating device. However, the Examiner argues that because a receiving device may use the address received in the source address field of an Ethernet packet as a destination address in a future packet, the source address field should be considered to be the destination field. However, this position is contrary to the language of the claims and contrary to the understanding of a person of skill in the art. A person of skill in the art would understand that an Ethernet packet includes both a source address field and a destination address field in a specific position and order in the packet. The fact that the source address of a received packet may be used as destination address in a future packet by a receiving system does not and cannot make the source address of the packet become the destination address of the packet.

Because the combination of Byers, Hadzic and Mercer fails to disclose every element of independent claim 1, the Examiner's rejection of claim 1 and its associated dependent claims 2-4 and 16 should be reversed.

D. *Claims 5-7 and 9 Are Unpatentable Over Bryers, Hadzic, Mercer in further view of Stevens.*

Appellants maintain their position that claims 5-7 and 9 are patentable over the combination of Bryers, Hadzic, and Mercer, in further view of Stevens, *TCP/IP Illustrated* ("Stevens"). Appellants note that the Examiner did not present any rejections of claims 18-21, 30, 32, and 33 under 35 U.S.C. §§ 102 or 103 in the final rejection or the Examiner's Answer. Appellants therefore presume that the Examiner has found claims 18-21, 30, 32, and 33 patentable under 35 U.S.C. § 102 and/or § 103.

Conclusion

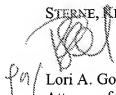
In view of the foregoing as well as those set forth in Appellants' Brief on Appeal, Appellants respectfully request that the Examiner's objection to the specification, the rejection of

claims 5-7, 9, 18, and 30 as unpatentable under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description, and the rejection of claims 5-7, 9, 18, and 30 as unpatentable under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to point out and distinctly claim the subject matter which applicant regards as the invention be reversed.

Appellants further request the Examiner's rejection of claims 1-4, and 16 over Bryers in view of Hadzic and Mercer and the rejection of claims 5-7, and 9 under 35 U.S.C. § 103(a) over Bryers, Hadzic, Mercer, in view of Stevens be reversed.

Respectfully submitted,

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